IN THE SPECIFICATION

Please replace the paragraph spanning page 9, line 33 to page 10 line 37 with the following paragraph:

Vaccines of the invention may be administered in conjunction with other immunoregulatory agents. In particular, compositions will usually include an adjuvant. Preferred further adjuvants include, but are not limited to. In addition to the mucosal adjuvants given above, the compositions of the invention may include one or more further antigens from the following group: (A) aluminium salts including hydroxides (*e.g.*, oxyhydroxides), phosphates (*e.g.*, hydroxyphosphates, orthophosphates), sulfates, *etc* (*e.g.* see Chapters 8 & 9 of ref. 15}), or mixtures of different aluminium compounds, with the compounds taking any suitable form (*e.g.* gel, crystalline, amorphous, *etc*), and with adsorption being preferred; (B) MF59™ (5% Squalene, 0.5% ~~Tween 80~~ TWEEN®80 (polyoxyethylenesorbitan monooleate), and 0.5% ~~Span 85~~ SPAN®85 (sorbitan trioleate) {see Chapter 10 of 15; see also ref. 16}; (C) liposomes {see Chapters 13 and 14 of ref 15}; (D) ISCOMS {see Chapter 23 of ref. 15}, which may be devoid of additional detergent {17}; (E) SAF, containing 10% Squalane, 0.4% ~~Tween 80~~ TWEEN®80 (polyoxyethylenesorbitan monooleate), 5% ~~pluronic-blocked polymer~~ PLURONIC™ L121-blocked polymer (block copolymer of propylene oxide and ethylene oxide), and thr-MDP either microfluidized into a submicron emulsion or vortexed to generate a larger particle size emulsion, {see Chapter 12 of ref. 15};(F) RIBI™ ~~Ribi™~~ adjuvant system (RAS), (Ribi Immunochem) containing 2% Squalene, 0.2% ~~Tween 80~~

TWEEN®80 (polyoxyethylenesorbitan monooleate), and one or more bacterial cell wall components from the group consisting of monophosphorylipid A (MPL), trehalose dimycolate (TDM), and cell wall skeleton (CWS), preferably MPL + CWS (~~Detox™~~ DETOX™); (G) saponin adjuvants, such as QuilA or QS21 {see Chapter 22 of ref. 15} or STIMULON™ ~~Stimulon™~~ {18}, (H) chitosan {*e.g.* 19}; (I) complete Freund's adjuvant (CFA) and incomplete Freund's adjuvant (IFA); (J) cytokines, such as interleukins (*e.g.* IL-1, IL-2, IL-4, IL-5, IL-6, IL-7, IL-12, *etc.*), interferons (e.g. interferon-g), macrophage colony stimulating factor, tumor necrosis factor, *etc.* {see Chapters 27 & 28 of ref. 15}; (K) monophosphoryl lipid A (MPL) or 3-O-deacylated MPL (3dMPL) {*e.g.* chapter 21 of ref. 15}; (L) combinations of 3dMPL with, for example, QS21 and/or oil-in-water emulsions {20}; (M) a polyoxyethylene ether or a polyoxyethylene ester {21}; (N) a polyoxyethylene sorbitan ester surfactant in combination with an octoxynol {22} or a polyoxyethylene alkyl ether or ester surfactant in combination with at least one additional non-ionic surfactant such as an octoxynol {23}; (N) a particle of metal salt {24}; (O) a saponin and an oil-in-water emulsion {25}; (P) a saponin (*e.g.* QS21) + 3dMPL + IL-12 (optionally + a sterol) {26}; (Q) *E.coli* heat-labile enterotoxin ("LT"), or detoxified mutants thereof, such as the K63 or R72 mutants {*e.g.* Chapter 5 of ref. 27}; (R) cholera toxin ("CT"), or detoxified mutants thereof {*e.g.* Chapter 5 of ref. 27}; (S) double-stranded RNA; (T) microparticles (*i.e.* a particle of ~100nm to ~150mm in diameter, more preferably ~200nm to ~30mm in diameter, and most preferably ~500nm to ~10 mm in diameter) formed from materials that are biodegradable and non-toxic (*e.g.* a poly(a-hydroxy acid), a polyhydroxybutyric acid, a polyorthoester, a polyanhydride, a polycaprolactone, *etc.*), with poly(lactide-co-

glycolide) being preferred, optionally treated to have a negatively-charged surface (*e.g.* with SDS) or a positively-charged surface (*e.g.* with a cationic detergent, such as CTAB); (U) oligonucleotides comprising CpG motifs *i.e.* containing at least one CG dinucleotide; (V) monophosphoryl lipid A mimics, such as aminoalkyl glucosaminide phosphate derivatives *e.g.* RC-529 {28); (W) polyphosphazene (PCPP); (X) a bioadhesive {29} such as esterified hyaluronic acid microspheres {30} or a mucoadhesive selected from the group consisting of cross-linked derivatives of poly(acrylic acid), polyvinyl alcohol, polyvinyl pyrollidone, polysaccharides and carboxymethylcellulose; or (Y) other substances that act as immunostimulating agents to enhance the effectiveness of the composition {*e.g.* see Chapter 7 of ref. 15}. Aluminium salts and MF59^{TM} are preferred adjuvants for parenteral immunisation. Mutant toxins are preferred mucosal adjuvants.

Please replace the paragraph on page 11, line 34 with the following paragraph:

Rabies antigen(s) {*e.g.* 77} such as lyophilized inactivated virus {e.g. 78, ~~RabAvertTM~~ RABAVERT^{TM}}.

Please replace the paragraph on page 18, lines 13-16 with the following paragraph:

Immunofluorescence microscopy showed that purified OmpA protein binds to ME-180 human cervical epithelial cells. Monolayers of the ME-180 cells were treated with PBS (control) or with 1 mg/ml purified OmpA, labeled using polyclonal mouse antiserum against recombinant Ng OmpA-His, followed by anti-mouse ~~Alexa Fluor~~ ALEXA

FLUOR® 488 conjugated antibodies. The results are in Figure 19.

Please replace the paragraph on page 18, lines 22-30 with the following paragraph:

Immuno double fluorescence staining of extracellular (green) and intracellular (red) bacteria was performed on monolayers of ME-180 cells infected with wild type F62 and ΔOmpA mutant. Non-adherent bacteria were removed by washings. Cells were fixed and incubated with primary polyclonal antibody. The cells were then incubated with ~~Alexa Fluor~~ ALEXA FLUOR® 488 secondary antibodies. After permeabilization with ~~Triton~~ TRITON® X-100, cells were incubated with the primary antibody to label internalized bacteria, followed by incubation with ~~Alexa Fluor~~ ALEXA FLUOR® 568 secondary antibodies. Wild-type F62 bound to significant numbers on the cell monolayers and some bacteria were observed inside the cells (white arrows; Figure 20A). In contrast, very few ΔOmpA bacteria either bound to or entered the cells (Figure 20B).